## Glossary

Acid soil, Alkaline soil A pH of 7 is neutral, below 7 is acid, and above 7 is alkaline. Soils in areas with high amounts of rainfall tend to be acidic. Soils in areas with limestone tend to be alkaline. Many plants will grow well in soils with a range of pH from slightly acid to slightly alkaline.

**Aeration** The process of introducing air space in soil. (See core aeration)

**Aerobic** A process of decomposition that is active in the presence of oxygen. A properly working compost pile will decompose under aerobic conditions.

**Anaerobic** A process of decomposition that occurs without the presence of oxygen. The organic solids are disintegrated by anaerobic bacteria in a septic tank.

**Annual plant** A plant that completes its life cycle in a year or less.

**Balled and burlapped** (B&B) Some trees and shrubs are dug from the field and sold with a large ball of soil around their roots. This ball of soil is traditionally wrapped with burlap cloth but may also be wrapped with a plastic cloth or wire mesh.

**Bare root** Some trees, shrubs, and perennials are sold, while dormant, with the soil removed from their roots.

**Bedrock** The consolidated rock that underlies the topsoil and subsoil.

**Biennial plant** A plant that completes its life cycle in two years.

**Botanical name** The combination of the genus and species names of a plant. It is expressed in Latin.

**Branch collar** A branch collar is the swollen area of trunk tissue that forms around the base of a branch. If you prune away the branch collar, you remove not only branch wood, but also trunk wood, opening the plant to more extensive decay.

**Compost** A mixture of decomposed organic materials such as leaves, twigs, grass clippings, and kitchen waste. It is used as a fertilizer or to improve your soil's texture.

**Container grown** Some trees, shrubs, and herbaceous material are grown in pots instead of grown in a field and dug for sale.

**Core aeration** A practice that forces hollow metal tubes into the ground and brings up small cores (plugs) of soil. Beneficial for air and water movement into the soil.

**Cover crop** An annual planting of grasses or legumes that protects soil from erosion and improves its fertility.

**Deciduous** A plant that annually sheds its leaves.

**Dormant** The stage when a plant has stopped growth and production. For example, deciduous trees are dormant in the winter.

**Drainfield** In a septic system, the network of pipes or tiles through which wastewater is dispersed into the soil.

**Drainage easement** A dedicated area of land for stormwater storage and movement. It is identified on a plat of the development.

**Drip line** The circle you would draw on the ground directly under a tree's outermost branches. It is referred to as the drip line because rainfall tends to drip at this point from the branch tips. The tree's feeder roots extend to this point, and the term is used in conjunction with fertilizing, watering, and grading around trees.

**Dry well** An underground reservoir filled with stone and lined with filter fabric that holds water until it seeps into the soil.

**Erodibility** The potential for a soil to erode. Can be found in the soil survey.

**Erosion** The washing away of soil particles by water, wind, ice, or other geological events.

**Eutrophication** An accumulation of plant nutrients, such as nitrate and phosphate, in a water body leading to an overabundance of algae and other water vegetation.

**Evapotranspiration** The loss of soil moisture from the ground's surface and growing plants.

**Exotic** Plants or animals introduced into a community that are not native to the area.

**Fertilizer** Supplemental nutrients for your plants, often purchased as an inorganic derivative of nitrogen, phosphate, and potash. You can also use composted manures as an organic alternative.

**Filter fabric** A porous cloth-like material used to prevent fine soil particles from clogging gravel or tile drains.

**French drain** Length of perforated pipe placed underground in gravel with an open surface drain inlet.

**Gabions** Wire cages filled with crushed stone that are often stacked and used to reduce erosion along steep slopes and streambanks.

**Grading** The moving of soil and rocks to shape the land.

**Groundcover** Plants that cover the ground like a carpet and are grown for their ornamental value and their ability to protect soils from eroding.

**Groundwater** Water that exists underground below the water table. It fills up pore spaces in soil and joints in rocks.

**Habit** The shape and character of a plant as it matures.

**Habitat** The specific environment of a plant or animal. The appropriate habitat for a species often varies in size, content, and location, changing with the phases in an organism's life cycle.

**Hedgerow** A group or row of trees and shrubs separating two grassy areas. It can provide habitat for small wildlife.

**Herbaceous** A plant that dies to the ground each year and regrows stems the following year.

**Horizons** The noticeable layers of a soil structure — topsoils, subsurface soils, subsoils, parent material, and eventually bedrock. Described together, these make up a soil profile.

**Hydric soil** Characteristic of wetlands. The soil is characterized by wet conditions, saturated most of the year, and often organic in composition.

**Impervious cover** Any hard surface material such as roof tops, asphalt, or concrete that limits infiltration and induces high runoff rates.

**Infiltration** The amount of water from the soil's surface that can move through a soil through its joints and pores.

**Inorganic** Materials that were not created through living processes, such as minerals, chemically derived nutrients, and rock.

**Invasive** A plant that proliferates quickly and can aggressively compete with desired plants.

**Irrigation** Supplemental water applied to plants.

**Leaching** A process in the soil that is similar to brewing tea or coffee. Water moves through the soil removing soluble nutrients and minerals. In areas of high rainfall, rain water leaches good as well as bad substances from the soil.

**Lime** Added to soil to raise pH and lower the soil's acidity. Sources include Dolomitic Limestone and Calcium Carbonate.

**Master Gardener** A volunteer program run by Virginia Cooperative Extension to train citizens in many areas of horticulture.

**Microclimate** An area where climatic conditions differ from the norm. It can be natural, such as a mountain valley, or constructed, such as a wind-protected deck.

**Mulch** Organic materials, such as shredded bark, sawdust, straw, or leaves, spread on the soil to protect roots and reduce or prevent erosion.

**Nitrogen** A key nutrient needed for plant growth. It improves leaf and stem growth.

Nonpoint source pollution Pollution which cannot be traced to a direct outlet or discharge point. Examples would include chemicals applied to lawns and gardens, and automotive fluid spills or leaks on roads and driveways. Runoff from a heavy rain then carries them directly into nearby streams.

**Nutrients** Various types of materials that become dissolved in water and induce plant growth.

**Organic matter** Matter derived from living organisms. Organic materials such as leaves, peat, grass clippings, and compost are often added to your soil to improve its fertility and structure.

**Parging** A cement mixture used to coat the outer basement walls prior to backfilling. It is combined with an asphaltic coating for waterproofing.

**Peat** A marsh or swamp deposit of water-soaked plant remains containing more than 50 percent carbon. It is a highly water-retentive, spongy, organic soil amendment that is available for your garden or flower bed. It may add to your soil's acidity.

**Perched groundwater table** Water that cannot infiltrate the subsoil due to a restricting layer of material such as clay or shale.

**Percolation** The downward movement of water in a soil.

**Perennial plant** A species of plant that lives longer than two years.

**Permeability** The ability of water to move through your soil.

**Phosphorus** A key nutrient for plant growth. It improves the plant's root growth, flowering, and fruiting.

**Physiographic** The physical features of the land, in particular its slope and elevation.

**Plugging** A method used to plant warmseason grasses with small sod pieces. It is commonly employed on established bentgrass or bermudagrass turf. Because the soil remains attached to the rhizomes, plugging is better able to survive drought than sprigging.

**Point source pollution** Water pollution from a single source such as a sewage plant pipe outfall.

**Pollutants** Contaminants to the environment.

**Porosity** The volume of space in a rock or soil between soil or mineral particles.

**Potassium (K)** A key nutrient for plant growth. It is also referred to as potash.

**Pruning** The cutting and removing of a plant's twigs or buds to improve or maintain its health or direct its growth.

Rhizomes Thick, horizontal stems that grow below the ground. They may be long and slender, as in some lawn grasses, or thick and fleshy, as in many irises. Rhizomes are often specialized for food storage, and they allow plants to survive and spread after mowing or clipping.

**Rip rap** Large stones placed on soil surfaces or stream beds to reduce erosion by flowing water.

**Riparian** The area adjacent to a stream, river, or lake.

**Root ball** The intact soil and roots of balled and burlapped and container grown plants.

**Runoff** Water from rain, snowmelt, or irrigation that flows over the ground surface and returns to streams, "running off" the land to the stream. It includes the water and everything it picks up along the way.

**Sediment** Soil particles transported from their source and deposited by water.

**Septic system** A sewage system that relies on a septic tank and drainfield to store and/or treat wastewater.

**Soil** The surface layers of sand, clay, silt, and organic material on the surface of the earth that support plants. Soil has properties

resulting from the integrated effect of climate and living matter acting upon the soil's parent material over time.

**Soil survey** The document created by the USDA Natural Resources Conservation Service which records soil types with maps and describes soil characteristics.

**Sprigging** A method of planting grasses with stolons or rhizomes in furrows or small holes. The bermudagrass or zoysiagrass rhizomes or stolons have little or no soil attached to them and can be planted by hand spreading.

**Stabilization** The protection of erodible soils along streams or slopes with bioengineering techniques, terrace walls, erosion mats, or rock.

**Stormwater** Water from rain or melting snow. Many communities are concerned about the management of stormwater in developed areas because the amount of impervious surface has increased, thus reducing the area where rain water may naturally infiltrate the soil.

**Sump** A built in basin containing a pump that continually removes groundwater from outside your basement's walls and floor, discharging the water away from your house. It prevents water from inundating your basement.

**Swale** An elongated depression in the land to channel runoff.

**Terracing** Shaping a slope with a series of "steps." The steps allow for planting and maintenance on level areas and reduce the potential for erosion across a steep slope.

**Thatching** The removal of excess grass clippings from a lawn. The build up of too many clippings prevents the breakdown of the grass and can be a home for harmful insects.

**Tilling** The working of the soil to improve its structure and drainage.

**Topsoil** The surface soil layer. This layer may be very shallow or very deep and is a precious resource.

**Transplanting** Moving a plant from one place and planting it in a new location.

**Vine** Plants that climb by twining, tendrils, or clinging.

**Watershed** The region or area contributing to the supply of a river or lake. It is a drainage area separated from other drainage areas by a dividing ridge.

**Weed** A plant out of place.